## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application.

1-32. (Canceled)

33. (Previously presented) A method according to claim 34, wherein the implantable device is wholly implanted subcutaneously in the host.

34. (Currently amended) A method of measuring glucose concentration in a biological fluid, comprising:

providing an implantable device configured for implantation into a tissue of a host, the implantable device comprising a housing comprising a convexly protruding and continuously curved active sensing surface and a continuously curved membrane directly in contact with the convexly protruding and continuously curved active sensing surface, wherein the membrane comprises ~~an enzyme layer that comprises an enzyme and that is continuously formed over the active sensing surface, and~~ an angiogenic layer positioned over the convexly protruding and continuously curved active sensing surface to assist in a formation of vasculature adjacent to the convexly protruding and continuously curved active sensing surface such that glucose can be provided to a sensing mechanism for continuous measurement of glucose concentration when the implantable device is implanted in the host; and

measuring a signal from the implantable device, wherein the signal is indicative of glucose concentration.

35-37. (Canceled)

38. (Currently amended) A method of monitoring glucose levels, comprising:

providing an implantable device configured for implantation into a tissue of a host, the implantable device comprising a housing and a sensor capable of continuous glucose sensing, wherein the sensor comprises at least one convexly protruding and continuously curved electroactive surface over which a continuously curved membrane, comprising a vascularization promotion layer ~~and a continuously formed enzyme layer comprising an enzyme~~, is directly deposited onto the electroactive surface; and

measuring a signal from the implantable device, wherein the signal is indicative of a glucose level.

39-40. (Canceled)

41. (Previously presented) A method according to claim 38, wherein the implantable device is sized and configured for being wholly implanted subcutaneously.

42. (Previously presented) A method according to claim 41, further comprising transmitting data from the implantable device telemetrically.

43-47. (Canceled)

48. (Currently amended) The method of claim 34, wherein the membrane further comprises a diffusion resistance layer configured to control the flux of oxygen and glucose to the enzyme layer ~~diffusion resistance layer configured to control the flux of oxygen and glucose to the enzyme layer~~.

49. (Currently amended) The method of claim 38, wherein the membrane comprises an enzyme ~~comprises glucose oxidase~~.

50-53. (Canceled)

54. (Previously presented) The method of claim 34, wherein the implantable device further comprises an electrolyte phase, wherein the electrolyte phase is situated between the membrane and the sensing mechanism.

55. (Currently amended) The method of claim 38, wherein the implantable device further comprises an electrolyte phase, wherein the electrolyte phase is situated between the ~~sensing~~ membrane and the sensor.

56. (Previously presented) The method of claim 38, wherein the implantable device is capable of accurately measuring glucose accurately in a host for a period of time exceeding 90 days.

57. (Previously presented) The method of claim 56, wherein the implantable device is capable of measuring glucose accurately for a period exceeding 150 days.

58. (Previously presented) The method of claim 56, wherein the implantable device is capable of measuring glucose accurately for a period exceeding 360 days.

59. (Previously presented) The method of claim 38, wherein the implantable device is configured to be explanted after 90 days.

60. (Previously presented) The method of claim 59, wherein the implantable device is configured to be explanted after 150 days.

61. (Previously presented) The method of claim 59, wherein the implantable device is configured to be explanted after 360 days.

62. (Previously presented) The method of claim 38, wherein the vascularization promotion layer stabilizes over a time period to produce long-term level reflecting adequate microcirculatory delivery of glucose and oxygen to the sensor.

63. (Previously presented) The method of claim 38, wherein the vascularization promotion layer is formed from a material selected from the group consisting of polytetrafluoroethylene, hydrophilic polyvinylidene fluoride, mixed cellulose esters, polyvinyl chloride, polyethylene, polypropylene, Teflon, cellulose acetate, cellulose nitrate, polycarbonate, polyester, nylon, polysulphone, polymethacrylate, mixed esters of cellulose polyvinylidene difluoride, silicone, and polyacrylonitrile.

64. (Previously presented) The method of claim 38, wherein the vascular promotion layer comprises a material that has a characteristic of stimulating growth of new vascular structures by the host close to the implantable device.

65. (Previously presented) The method of claim 38, wherein the sensor senses glucose using an enzymatic mechanism.

66. (Previously presented) The method of claim 38, wherein the sensor senses glucose using a non-enzymatic mechanism.

67-69. (Canceled)

70. (Previously presented) The method of claim 34, wherein the implantable device is capable of accurately measuring glucose accurately in a host for a period of time exceeding 90 days.

71. (Previously presented) The method of claim 70, wherein the implantable device is capable of measuring glucose accurately for a period exceeding 150 days.

72. (Previously presented) The method of claim 70, wherein the implantable device is capable of measuring glucose accurately for a period exceeding 360 days.

73. (Previously presented) The method of claim 34, wherein the implantable device is configured to be explanted after 90 days.

74. (Previously presented) The method of claim 73, wherein the implantable device is configured to be explanted after 150 days.

75. (Previously presented) The method of claim 73, wherein the implantable device is configured to be explanted after 360 days.

76. (Previously presented) The method of claim 34, wherein the angiogenic layer stabilizes over a time period to produce long-term level reflecting adequate microcirculatory delivery of glucose and oxygen to the sensing region.

77. (Previously presented) The method of claim 34, wherein the angiogenic layer is formed from a material selected from the group consisting of polytetrafluoroethylene, hydrophilic polyvinylidene fluoride, mixed cellulose esters, polyvinyl chloride, polyethylene, Teflon, cellulose acetate, cellulose nitrate, polycarbonate, polyester, nylon, polypropylene, polymethacrylate, polysulfone, mixed esters of cellulose polyvinylidene difluoride, silicone, and polyacrylonitrile.

78. (Previously presented) The method of claim 34, wherein the angiogenic layer comprises a material that has a characteristic of stimulating growth of new vascular structures by the host close to the implantable device.

79. (Previously presented) The method of claim 34, wherein the active sensing surface is configured to sense glucose using an enzymatic mechanism.

80. (Previously presented) The method of claim 34, wherein the active sensing surface is configured to sense glucose using a non-enzymatic mechanism.

81. (Previously presented) The method of claim 34, wherein the active sensing surface is configured to sense glucose using a resonance mechanism.

82. (Previously presented) The method of claim 34, wherein the active sensing surface is configured to sense glucose using an acoustic wave mechanism.

83. (Previously presented) The method of claim 34, wherein the active sensing surface is configured to sense glucose using an optical mechanism.

84-87. (Canceled)